

IN THE CLAIMS:

1. (cancelled).
2. (Previously Presented) The slurry of claim 14, wherein the chelating particle comprises a metal oxide abrasive, iron oxide, a doped metal oxide, a metal nitride particle, a metal oxynitride particle, a metallic particle, a metal alloy particle, an organometallic particle, a polymer particle, a buckyball, a buckybowll, a carbon nanotube, a carbon black particle, activated carbon, a charcoal particle, a diamond particle, montmorillonite, an inorganically- and/or organically-modified clay, or a combination thereof.
3. (Previously Presented) The slurry of claim 14, wherein the chelating particle has a net negative zeta potential before attachment.
4. (Previously Presented) The slurry of claim 3, wherein the net negative zeta potential remains negative even after attachment of the plurality of chelator compounds.
5. (Previously Presented) The slurry of claim 14, wherein the chelating particle has an average particle size from about 1 nm to about 4000 nm.
6. (Previously Presented) The slurry of claim 14, wherein the plurality of chelator compounds attached to the chelating particle possess functional groups comprising hydroxyls, carboxylic acids, amines, amides, imines, imides, mercaptans, sulfonic acids, hydroxamic acids, carbonyl groups, esters, ethers, ureas, cyano groups, nitro groups, phosphonic acids, phosphonates, carbonates, inorganic salts thereof, or a combination thereof, and wherein at least a portion of the functional groups are no further than about 7Å from another functional group.
7. (Previously Presented) The slurry of claim 14, wherein each chelator compound, before being attached to the chelating particle, possesses at least three functional groups comprising hydroxyls, carboxylic acids, amines, amides, imines, imides, mercaptans, sulfonic acids, hydroxamic acids, carbonyl groups, esters, ethers, ureas, cyano groups, nitro groups, phosphonic acids, phosphonates, carbonates, inorganic salts thereof, or a combinations thereof.

8. (Previously Presented) The slurry of claim 14, wherein the plurality of chelator compounds comprises one or more of the following oligomeric and/or (co)polymeric chelators: poly(styrene sulfonic acid), poly(vinyl sulfonic acid), poly(acrylic acid), poly(methacrylic acid), a poly(acrylate), a poly(methacrylate), a poly(alkacrylate), poly(maleic acid), poly(vinyl acetate), poly(vinyl alcohol), poly(acrylamide), poly(cyanoacrylate), a cellulosic material, or a mixture or copolymer thereof.

9. (Previously Presented) The slurry of claim 14, wherein the plurality of chelator compounds does not comprise poly(styrene sulfonic acid), poly(vinyl sulfonic acid), poly(acrylic acid), poly(methacrylic acid), a poly(acrylate), a poly(methacrylate), a poly(alkacrylate), poly(maleic acid), poly(vinyl acetate), poly(vinyl alcohol), or a mixture or copolymer thereof.

10. (Currently Amended) The slurry of claim 14, wherein the chelator compounds are attached to the chelating particle via, optionally being attached to a spacer and the spacer being attached to the particle, by a covalent chemical bond.

11. (Currently Amended) The slurry of claim 10, ~~wherein the chelating compounds are attached to a spacer, said spacer being disposed between the chelating particle and the chelating compounds,~~ wherein said spacer comprises at least about 10 carbon atom linkages.

12. (Previously Presented) The slurry of claim 11, wherein the spacer is oligomeric or (co)polymeric and comprises a polysiloxane; a polyolefin; a polyacrylate; a polyalkacrylate; a polycarbonate; a perfluorinated polymer; a halogenated polymer; a polyimide; a polyimine; a conjugated (co)polymer; a polyketone; a polyether; a polyurethane; a polylactide; or a copolymer or combination thereof.

13. (cancelled)

14. (Currently amended) A polishing, etching, and/or residue removing slurry comprising:
a polishing accelerator;
a diluent;
optionally an abrasive material; and

a plurality of chelating particles that are insoluble in the diluent, said chelating particles comprising a particle and a plurality of chelator compounds ~~attached to the surface thereof~~, wherein the chelating compounds are attached to a spacer, said spacer being different than the chelating compounds and different than the particle, and said spacer being disposed between the chelating particle and the chelating compounds.

15. (Currently Amended) A chemical mechanical polishing slurry comprising:

an oxidizer;

a diluent;

optionally an abrasive material; and

a plurality of chelating particles that are insoluble in water and comprise:

a particle body and a plurality of chelator molecules ~~an oligomer and/or (co)polymer~~

having a plurality of pendant functional groups attached thereto,

said functional groups comprising hydroxyls, carboxylic acids, amines, amides, imines, imides, mercaptans, sulfonic acids, hydroxamic acids, carbonyl groups, esters, ethers, ureas, cyano groups, nitro groups, phosphonic acids, phosphonates, carbonates, inorganic salts thereof, or a combination thereof, wherein at least a portion of the functional groups are no further than about 7Å from another functional group, and wherein at least a portion of the chelator molecules having a plurality of pendant functional groups attached thereto are attached to a spacer, said spacer being attached to the particle, said spacer being different than the chelator and different than the particle, and said chelator molecules being attached to the spacer, and

wherein the pendant functional groups are present at the surface of the particle when the particle is present in a solution containing water.

16-21. (cancelled).

22. (Currently Amended) The slurry of claim 15, wherein the functional groups on the chelators ~~oligomer and/or (co)polymer~~ attached to the particle comprise at least three sulfonic acid groups, and the oligomer and/or (co)polymer is attached the particle by a covalent chemical bond.

23. (New) The slurry of claim 15, wherein the chelators are attached the particle by a covalent chemical bond with the spacer.